

Installation of Corridor4DM v2023

DEFINITIONS

Fixed License: Licenses only the local workstation to run Corridor4DM. This license is specific to the workstation on which it resides, and Corridor4DM will only run on this workstation.

Floating License: also known as a concurrent license, allows Corridor4DM to be loaded on a greater number of computers than the number of licenses purchased. The maximum number of individuals using 4DM simultaneously is limited to the number of licenses purchased.

Client: Workstation installed with Corridor4DM and configured with a floating license. It is configured to communicate with the License Manager to authenticate the license for running Corridor4DM.

License Manager: System that will authenticate concurrent/floating client license requests to run Corridor4DM. This workstation does not necessarily have Corridor4DM installed, but it does have the License Manager software installed.

SYSTEM REQUIREMENTS

CORRIDOR4DM LICENSE MANAGER

Supported Operating Systems	Windows 7 (64 bit) ¹ Windows 8 (64 bit) ¹ Windows 10 (64 bit) Windows 11 (64 bit)	Windows Server 2008 R2 ¹ Windows Server 2012 R2 Windows Server 2016 Windows Server 2019 Windows Server 2022
Processor	Speed: 2.0 GHz or greater; Cores: 4 (minimum), 8 (recommended)	
Memory	8 GB (minimum); 16 GB or more (recommended)	
Disk Storage	512GB or larger NVME hard drive (recommended); <i>NOTE: 2GB is required to install application</i>	
Video Card	256 MB of on board Video Memory (minimum); 1 GB (recommended) 3D graphic card supporting OpenGL 3.0 (minimum) or greater (4.1 recommended)	
Monitor	Up to four HD (1920x1080) monitor(s)	
Admin	Administrative privileges are required to run the installer, License Manager software, and the Software Licensing Service	
Network	License Manager must be installed on a computer or server connected to the Local Area Network.	
Firewall Exceptions	The installation of the License Manager adds a firewall exception for the application rlm.exe titled INVIA Software Licensing. If this exception cannot be made, port exceptions are required for the following ports: <ul style="list-style-type: none"> 5053 – This port is needed for 4DM to request a license. 5054 – This port is needed to run the Reprise License Server Administration user interface. 5055 – This port is needed for 4DM to receive a license. 	
Virus Scan Exclusions	Exclusions to include the following: <ul style="list-style-type: none"> C:\Program Files\INVIA\Licensing C:\Program Files\INVIA\Licensing\INVIA.exe C:\Program Files\INVIA\Licensing\RLM.exe 	

CORRIDOR4DM PERSONAL

Supported Operating Systems	Windows 7 (64 bit) ¹ Windows 8 (64 bit) ¹ Windows 10 (64 bit) Windows 11 (64 bit)	Windows Server 2008 R2 ¹ Windows Server 2012 R2 Windows Server 2016 Windows Server 2019 Windows Server 2022
Processor	Speed: 2.0 GHz or greater; Cores: 4 (minimum), 8 (recommended)	
Memory	8 GB (minimum); 16 GB or more (recommended)	
Disk Storage	512GB or larger NVME hard drive (recommended); <i>NOTE: 2GB is required to install application</i>	
Video Card	256 MB of on board Video Memory (minimum); 1 GB (recommended) 3D graphic card supporting OpenGL 3.0 (minimum) or greater (4.1 recommended)	
Monitor	Up to four HD (1920x1080) monitor(s)	
Admin	Administrative privileges are required to run the installer, License Manager software, and the Software Licensing Service	
Firewall Exceptions	Port 104 - This port is used for DICOM transmission to the INVIA database.	
Virus Scan Exclusions	Exclusions to include the following: <ul style="list-style-type: none"> C:\Program Files\INVIA\Corridor4DM\ Corridor4DM.exe C:\Program Files\INVIA\CorridorBrowser\ CorridoSCPService.exe C:\Program Files\INVIA\CorridorBrowser\ CorridorSCP.exe C:\Program Files\INVIA\CorridorBrowser\ CorridorBrowser.exe C:\Programdata\INVIA\CorridorBrowser C:\Programdata\INVIA\Corridor4DM C:\INVIA_CB 	

NOTE: Verify that the License Server has a "Static IP" otherwise if the IP changes the license file will become invalid.

¹These operating systems are not recommended as they are at or nearing end of life

CORRIDOR4DM LICENSE MANAGER INSTALLATION PROCEDURE

Follow the steps below to install Corridor4DM License Manager.

ACQUIRE A LICENSE

This step should **only** be done on the computer or server hosting the License Manager, if using a Fixed license skip to Corridor4DM Personal Installation Procedure.

1. Insert the 4DM Installation CD into the CD drive of the computer or server installing 4DM and select Step 1: **Acquire HWID** (Figure 1) to run the Hardware ID Reader.

- For systems with no CD drive, the **HWIDReader.exe** can be placed onto a thumb drive, external hard drive, or an FTP. Access the HWIDReader.exe from within the Software Licensing folder on the Installation CD.

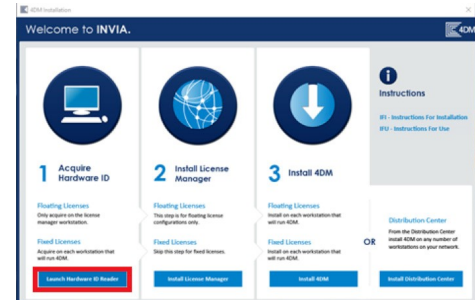


Figure 1: Acquire Hardware ID

2. Write down or copy (Ctrl-C) and paste the Hardware ID generated by the Hardware ID Reader (Figure 2) into an email. (e.g., A15098C6-1FA7-4410-8A9C-69E558FDD996:01).

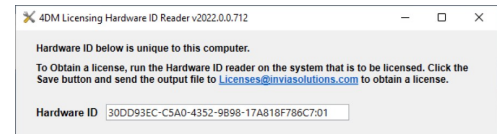


Figure 2: Copy / Write down the Hardware ID

3. Send **Hardware ID** to licenses@inviasolutions.com to receive a **server.lic** license file.

- **Resellers:** Use the 4DM Licensing Site to generate licenses. Refer to Field Note: **Obtain a License**.

4. Save and note the location of the file (to be used after 4DM installation).

INSTALL THE LICENSE MANAGER SOFTWARE

1. Select step 2: **Install License Manager** as seen in the 4DM Installation (Figure 3).

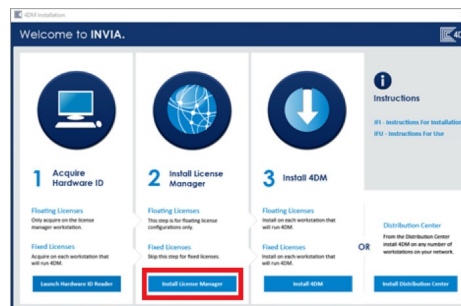


Figure 3: Install License Manager

2. Select **Yes** to permit the User Account Control to run 4DM_Licensing_Installer (Figure 4)

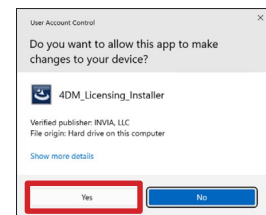


Figure 4: Select Yes to allow

3. Follow the steps in the 4DM Licensing installation script to finish the installation (Figure 5).

- Select **Next**
- Select **Install**
- Select **Finish**

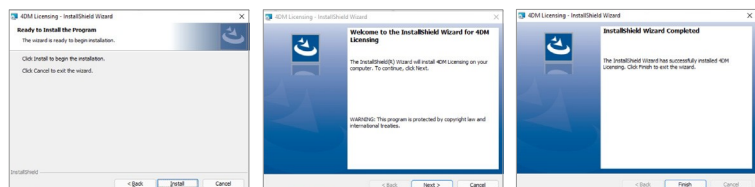


Figure 5: Follow steps in installation script

CONFIGURE AND VERIFY THE LICENSE MANAGER

1. Launch a web browser (e.g., Chrome, Google, Microsoft Edge) and set your URL to the IP address of the License Manager (the system on which you installed License Manager) and port 5054, (e.g., `http://123.456.789.100:5054`) and hit the Enter key. This will bring up the Reprise License Server Administration window (Figure 6).

2. Click the **Reread/Restart Servers** button ❶ from the left menu of commands. This will present an **ISV** menu (Figure 7).

- a. From the ISV menu ❷, select the option **invia**, if it exists (the option is not available if this is a first-time installation).
- b. If **invia** is not available: select **-all-**
- c. Then click on the **REREAD/RESTART** button ❸.

3. Next, click the **Status** button ❹ from the left menu of commands.

- a. First, verify that an entry is provided in the **license files** cell ❺.
 - If the license files box is empty, check that the `server.lic` file was copied to the correct folder and repeat steps 3 and 4.
- b. Then, verify that the ISV Server **invia** is running ❻.
 - If the ISV Server **invia** is not running, Repeat steps 3 and 4.
 - If this step fails, contact your primary support specialist.

4. Close the web browser window. The license manager is now ready for use.

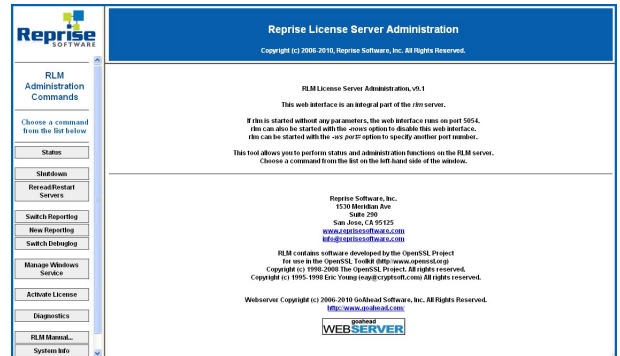


Figure 6: Reprise License Server Administration window

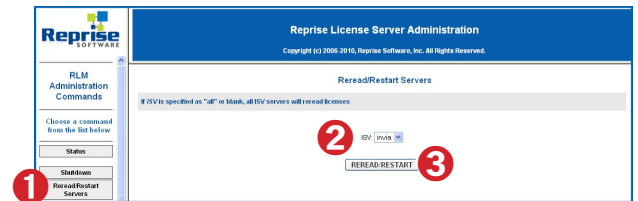


Figure 7: ISV menu

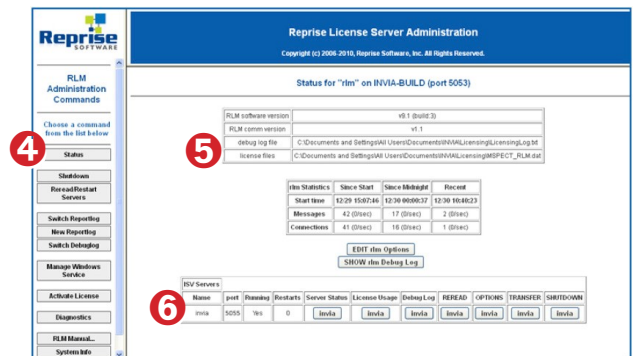


Figure 8: Status menu

INSTALL THE CORRIDOR4DM PERSONAL SOFTWARE

Repeat this section on **each workstation** that will run Corridor4DM(Personal). To perform the installation, you must be logged in as **Administrator** or have administrative privileges.

1. From the 4DM Installation screen, select Step 3: **Install 4DM** (Figure 9) to launch the 4DM(Personal) Installation script.
2. Select **Yes** to permit the User Account Control to run the 4DM installation (Figure 10).
3. The InstallShield Wizard for Corridor4DM window will be presented. Click **Next**.
4. If the **End User License Agreement** window is presented, read it, select “**I accept...**” and click **Next** (Figure 11).
5. If the **Customer Information** window is presented, click **Next** (Figure 12).
6. When the **Destination Folder** window (Figure 13) is presented, click **Next**. Do **not** change directories: 4DM is looking at this specific directory to start the application.

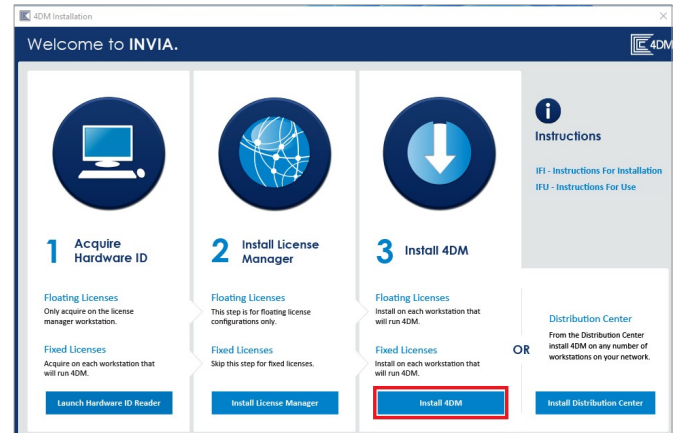


Figure 9: Install 4DM

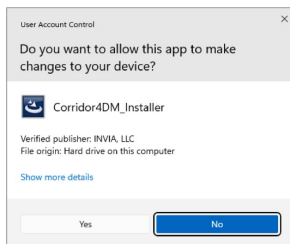


Figure 10: Select Yes to allow

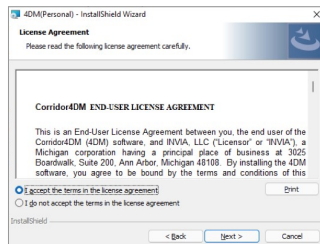


Figure 11: Accept terms

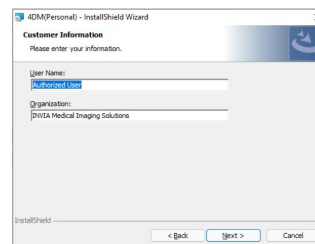


Figure 12: Customer Information

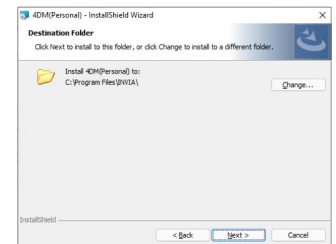


Figure 13: Destination folder

7. Confirm that all installation settings are correct in the **Ready To Install the Program** window (Figure 14) and click **Install**.

- A number of dialogs will display starting with a command prompt window. **DO NOT CLOSE OR INTERACT** with these windows. (e.g., Figure 15)
- Once the **Restore Preference** window is presented you can continue to interact with the application.

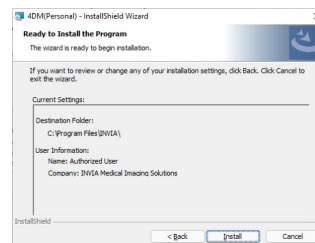


Figure 14: Confirm settings & install

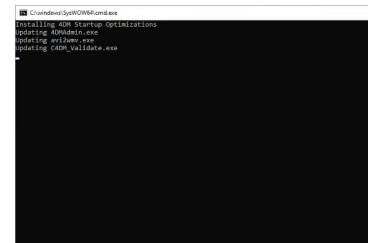


Figure 15: Example of dialog

8. If you have 4DM User Preferences from a previous installation of 4DM then select “**Yes**” in the Restore Preference window (Figure 16). If this is your first installation of 4DM then select “**No**.”

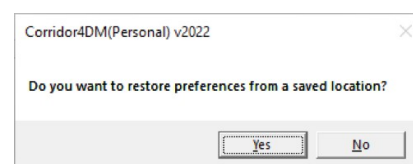


Figure 16: Restore Preferences

- If you selected No, continue to next step.

- If you selected Yes, the **Restore Configuration Files** window will display (Figure 17). Browse to the stored 4DM Preferences by using the folder icon **1** and select **Restore** button **2** to import the user preferences.
- A number of dialogs will display starting with a command prompt window. **DO NOT CLOSE OR INTERACT** with these windows. Wait for the InstallShield Wizard Completed dialog to display.

9. Click **Finish** to exit the Wizard.

10. Navigate to the **Corridor Browser** and launch the application.

11. The **Default Database Settings** window (Figure 18) will display. Define the database name you want to appear within the 4DM Patient Browser's **Sources** location and location you want to store the database. (We recommend storing the database on the 4DM License Manager Server in a dedicated shared directory permitting all 4DM Users read/write access to the shared directory.) Then select **OK**.

12. **4DM Patient Browser** (Figure 19) will launch. Double-click on a 4DM Patient **3** to launch Corridor4DM.

13. The **4DM Licensing v2022** window will display (Figure 20). Set the **License Type** to **Floating** **4** if using a floating license. *If not, see next section for a Fixed License installation.*

14. Enter the **IP Address** **5** for the system hosting the 4DM License Manager (Figure 21) and select the **test connectivity** **6** button.

15. Confirm the license status is valid **7** and select the **Save** icon **8**.

- If the license is invalid click the **Administration** icon **9**, this will launch the **Reprise License Server Administration** window to verify the License Manager's status.

16. 4DM will launch.

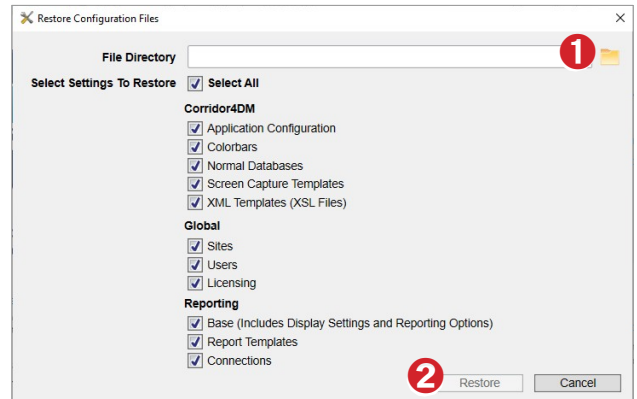


Figure 17: Restore Configuration Files

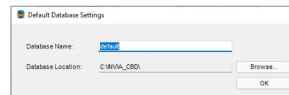


Figure 18: Default Database Settings

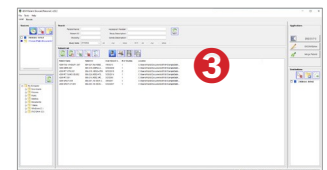


Figure 19: 4DM Patient Browser

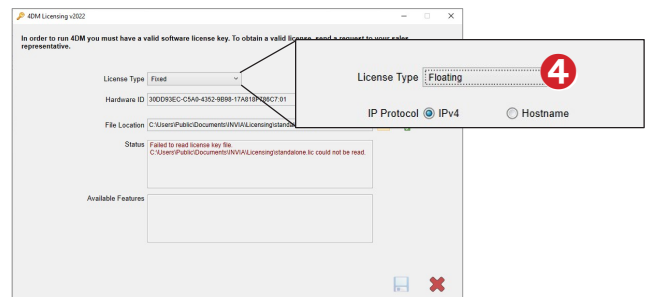


Figure 20: 4DM Licensing v2022 window

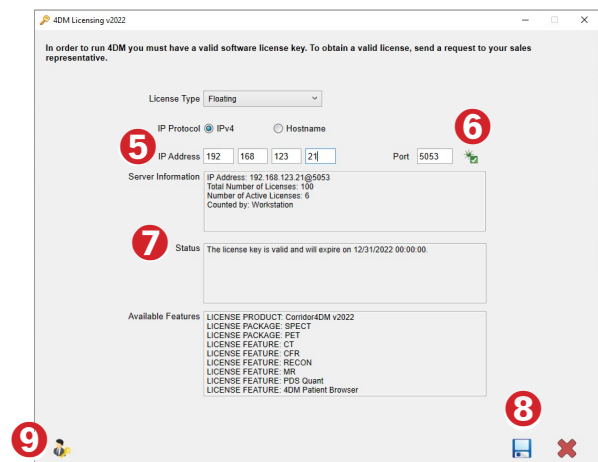


Figure 21: Enter IP Address & test connectivity

ACQUIRE A LICENSE

For a Fixed License Configuration, follow the steps below to install and license Corridor4DM.

1. Insert the 4DM Installation CD into the CD drive of the computer or server installing 4DM and select Step 1: **Acquire HWID** (Figure 22) to run the Hardware ID Reader.

- For systems with no CD drive, the **HWIDReader.exe** can be placed onto a thumb drive, external hard drive, or an FTP. Access the HWIDReader.exe from within the Software Licensing folder on the Installation CD.

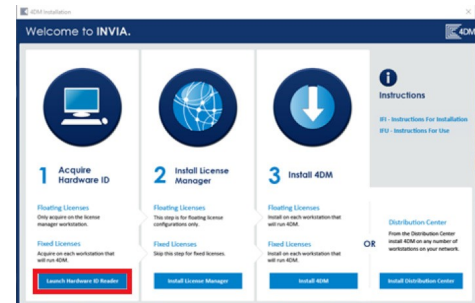


Figure 22: Acquire Hardware ID

2. Write down or copy (Ctrl-C) and paste the Hardware ID generated by the Hardware ID Reader (Figure 23) into an email. (e.g., A15098C6-1FA7-4410-8A9C-69E558FDD996:01).

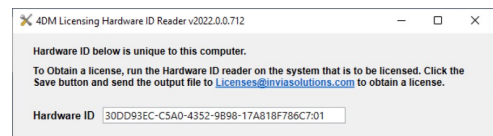


Figure 23: Copy / Write down the Hardware ID

3. Send **Hardware ID** to licenses@inviasolutions.com to receive a **standalone.lic** license file.

- **Resellers:** Use the 4DM Licensing Site to generate licenses. Refer to Field Note: **Obtain a License**.

4. Save and note the location of the file (to be used after 4DM installation).

5. Utilize **Corridor4DM Personal Installation Procedure** steps 1-12. Then place the **standalone.lic** file in the `c:\Users\Public\Public Documents\INVIA\Corridor4DM` directory and continue with **Corridor4DM Personal Installation Procedure** steps 13-15 to launch 4DM.

// Change Corridor4DM License Manager Default Ports

Repeat this section on **4DM License Manager** system to change from the RLM Default Ports to unique ports for RLM to communicate.

1. Obtain the **server.lic** file.

2. There are 3 ports that require updating:

- **Port 5053** - this port must be changed within the license file itself and then the license file must be re-signed using the license generator tool. The tool is located in the Support folder in the Utilities and the instructions are in there as well.
- **Port 5054** - RLM Web Interface Port 5054
 - Stop the 4DM Licensing Service from the Services page
 - Open a command window with admin rights

// Change Corridor4DM License Manager Default Ports

- Execute the following command to un-register the server from port 5054:

```
"C:\Program Files\INVIA\Licensing\rIm.exe"
```

- Execute the following command to register the server to port 5064:

```
"C:\Program Files\INVIA\Licensing\rIm.exe" -ws 5064 -c c:\Users\Public\Documents\INVIA\Licensing  
-dlog C:\Users\Public\Documents\INVIA\Licensing\LicensingLog.txt -install_service -service_name  
4DM Licensing Service
```

- **Port 5055** - This port must be changed within the license file itself and then the license file must be re-signed using the license generator tool. The tool is located within the Support folder in the Utilities. Same tool as is used for changing Port 5053 as described above.

3. To Re-sign the License File:

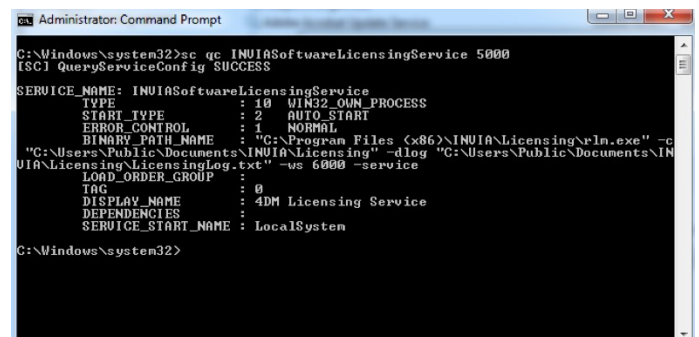
- Place a copy of the customer's license file to be updated into the following directory: \\invia-vmnas\Shared\Support\Utilities\rImSign
- Open a command prompt window (Window Key
- + R, then type cmd and hit enter)
 - Drag the **rImSign.exe** into the command prompt window
 - Hit the **space bar** to insert a space in the line in the command prompt window
 - Drag and drop the license file (**server.lic**) to be updated into the command prompt window
 - Hit **enter**
- Verify the license file (**server.lic**) was updated (re-signed) by looking at the time stamp for the file.
- Cut and paste the updated license file (**server.lic**) to another location to be given to customer.

4. Add an Inbound rule in the Firewall:

- Go to the Control Panel >System and Security> Windows Defender Firewall> Advanced Settings> **Inbound Rules**.
- In the Actions area, select **New Rule**.
- Select Port > next >Select TCP and Specific Local Ports and Add port "**5064**". Click **Next** > verify that the **Allow the connection** radio button is selected then **Next**.
- Make sure All Domains, Private and Public are selected and create a custom name and click **Finish**.

5. Open command prompt as administrator

6. Query service command (Figure 24):



```
Administrator: Command Prompt
C:\Windows\system32>sc qc INVIASoftwareLicensingService 5000
[SC] QueryServiceConfig SUCCESS

SERVICE_NAME: INVIASoftwareLicensingService
        TYPE               : 10  WIN32_OWN_PROCESS
        START_NAME           : 2   AUTO_START
        ERROR_CONTROL        : 1   NORMAL
        BINARY_PATH_NAME     : "C:\Program Files (x86)\INVIA\Licensing\rIm.exe" -c
        "C:\Users\Public\Documents\INVIA\Licensing" -dlog "C:\Users\Public\Documents\IN
        VIA\Licensing\LicensingLog.txt" -ws 5000 -service
        LOAD_ORDER_GROUP    :
        TAG                  : 0
        DISPLAY_NAME         : 4DM Licensing Service
        DEPENDENCIES         :
        SERVICE_START_NAME  : LocalSystem

C:\Windows\system32>
```

Figure 24: Query service command

// Change Corridor4DM License Manager Default Ports

- Sc qc INVIASoftwareLicensingService 5000

7. Configure the service (Figure 25):

- sc config INVIASoftwareLicensingService binpath="\"C:\Program Files\INVIA\Licensing\rIm.exe\" -c \"C:\Users\Public\Documents\INVIA\Licensing\" -dlog \"C:\Users\Public\Documents\INVIA\Licensing\LicensingLog.txt\" -ws 6000 -service"

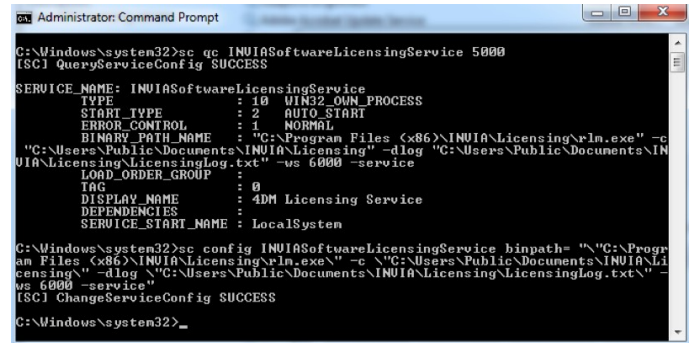


Figure 25: Configure the service

// Corridor4DM Distribution Center Installation Procedure

The Distribution Center permits you to distribute 4DM installer and/or 4DM Preferences on multiple workstations within your enterprise.

INSTALL THE CORRIDOR4DM DISTRIBUTION CENTER

To setup the Distribution Center you need to determine which system you want to utilize to host the distribution center and then run the Distribution Center installer. To perform the installation, you must be logged in as **Administrator** or have administrative privileges.

1. From the 4DM Installation screen, select Step 3: **Install Distribution Center** (Figure 26) to launch the 4DM(Personal) Installation script.
2. Select **Yes** to permit the User Account Control (Figure 27)
3. Follow the steps in the 4DM Licensing installation script to finish the installation (Figure 28).



Figure 26: Install License Manager

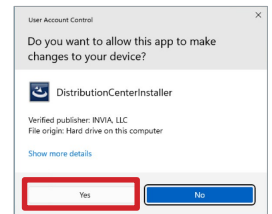


Figure 27: Select Yes to allow

- Select **Next**
- Select **Install**
- Select **Finish**

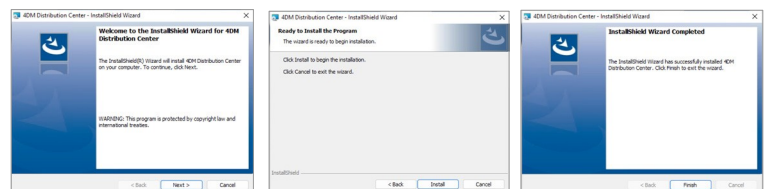


Figure 28: Follow steps in installation script

// Corridor4DM Distribution Center Installation Procedure

INSTALL THE CORRIDOR4DM DISTRIBUTION CENTER

1. On system that you want to install 4DM, launch a web browser and type in “http://[ip address of system running 4DM Client Installer]:80/INVIA (Figure 29).
2. Select the **Corridor4DM_Installer.exe** button **1** on the download page.
3. Navigate to the download directory and run the **Corridor4DM_Installer.exe** once it completes downloading. *Continue from the Installation Steps above.*

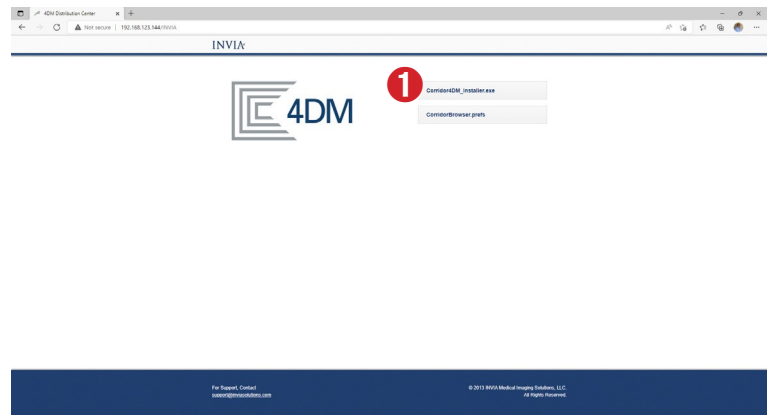


Figure 29: Web browser interface

STEPS TO DISTRIBUTE THE PREFERENCE FOR CORRIDOR BROWSER

1. Launch **Corridor Browser** (Figure 30)
2. Click on **Tools** menu **2**, and then click **Preferences** **3**
3. In the Preferences window (Figure 31), **Browse** **4** to the location where you would like the preferences to be stored
4. Select the **Preference** **5** you would like to distribute to other 4DM systems.
5. Select **Composite** **6** under **Backup Format**.
6. Click the **Backup** button **7**.
 - Once backup is complete, you receive a dialog specifying that your backup was successful.
7. To close the Preferences dialog, select the **Cancel** button **8**.
8. Navigate to CorridorBrowser.prefs file located in location you defined in step 3 to the following location on system where you installed the Distribution Center; C:\Users\Public\Public Documents\INVIA\DistributionCenter\Downloads\Preferences.

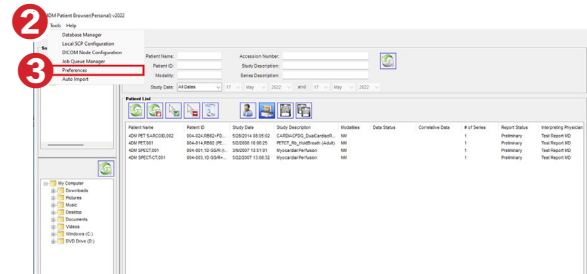


Figure 30: Follow steps in installation script

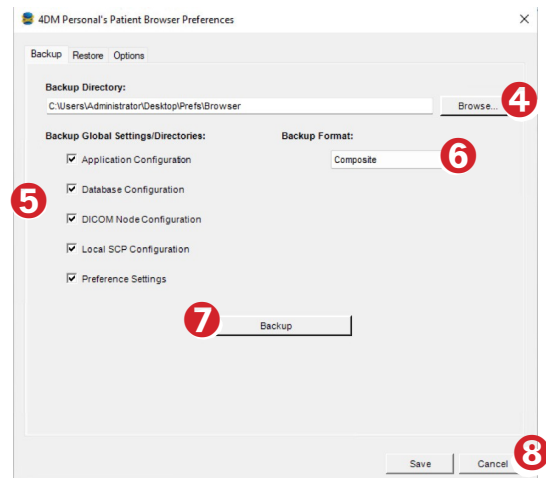


Figure 31: Patient Browser Preferences window

// Corridor4DM Distribution Center Installation Procedure

9. On system that you want to install the 4DM Preferences, launch browser and type in “http://[ip address of system running 4DM Client Installer]:80/INVIA (Figure 32).
10. Select **CorridorBrowser.prefs** **1** button on the download page.
11. Launch **Corridor Browser** (Figure 33) on the system you want to install the preferences.
12. Select **Tools** **2** menu and select **Preferences** **3**.
13. Select **Restore** tab **4** in the 4DM Personal’s Patient Browser Preference window.
14. Select the **Browse** **5** button and navigate to the **CorridorBrowser.prefs** in the download directory.
15. Select **Restore** **6** button to import the preference settings.
16. Select **Save** **7** to close the dialog and apply the changes.

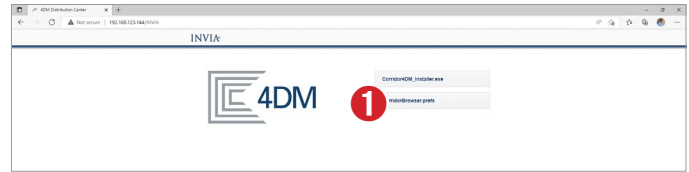


Figure 32: Web browser interface

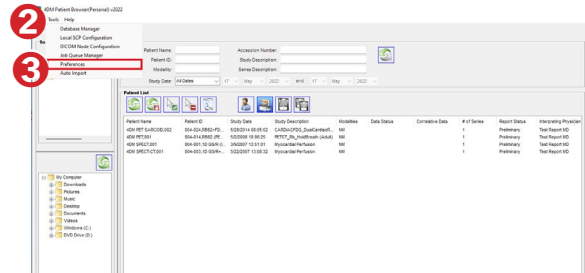


Figure 33: Corridor Browser

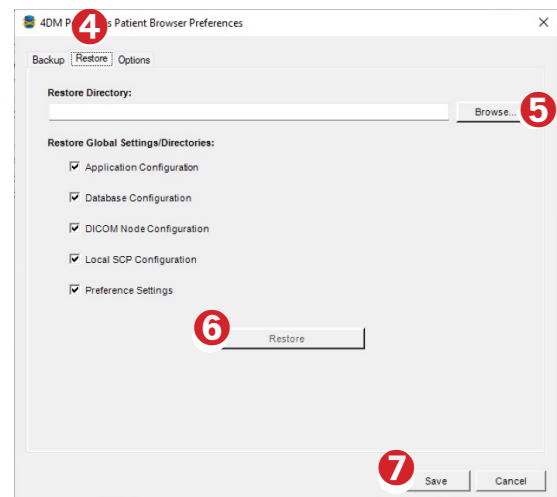


Figure 34: Patient Browser Preferences window

STEPS TO DISTRIBUTE THE PREFERENCE FOR 4DM APPLICATION

1. Launch **4DM Application**.
2. Click on **Preferences** button to open the 4DM Preferences window (Figure 35).
3. Click on **Utility** **8** in the menu bar and select **Backup** **9**.
4. In the Save window, select **No**.
5. Next, the **Backup Configuration Files** window will launch:
 - Select the **Browse** button to define location to store the 4DM Preferences; C:\Users\Public\Documents\INVIA\DistributionCenter\Downloads\Preferences

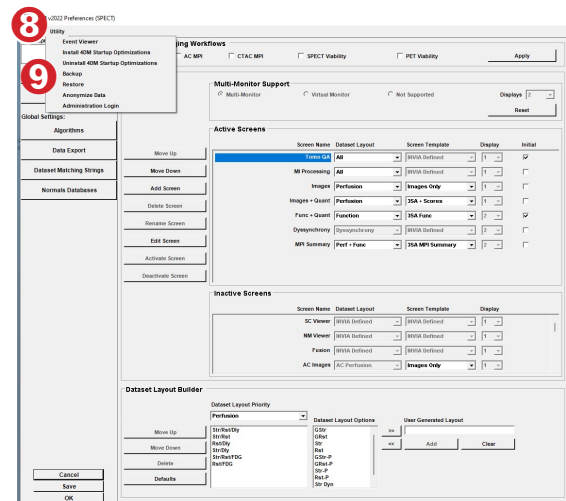


Figure 35: 4DM Preferences window

// Corridor4DM Distribution Center Installation Procedure

- Click the **Select Folder** button (Figure 36).
- In the Backup Configuration Files window, select the **Backup** button (Figure 37).
 - In the Backup was successful window, select **OK**.
 - On the system that you want to install the 4DM Preferences, launch a web browser and type in “http://[ip address of system running 4DM Client Installer]:80/INVIA” (Figure 38).
 - Select the **4DM settings** you want to import on the client (e.g. Connections.cfg, Licensing.cfg, mspdefs_SPECT.cfg, PhysicianList.cfg, Sites4DM.cfg, UserList.cfg, etc.)
 - Launch **4DM application**.
 - Select **Preferences** to open the 4DM Preferences window (Figure 39).
 - Click on **Utility** **1** in the menu bar and select **Restore** **2**.
 - In the Save window, select **No**.
 - Next, the **Restore Configuration Files** window will launch (Figure 40).
 - Select the **Browse** button **3** and navigate to the 4DM Preferences you located in the systems download directory.
 - Select **Restore** button **4** to import the preference settings.
 - Select **Save** to close the dialog and apply the changes.

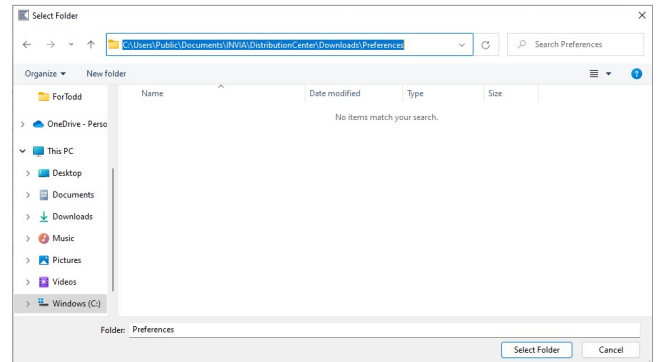


Figure 36: Select folder

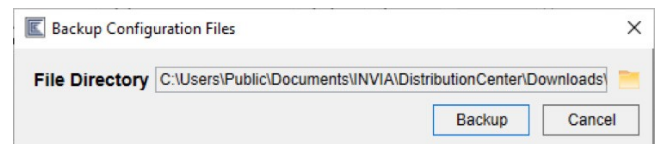


Figure 37: Backup configuration files

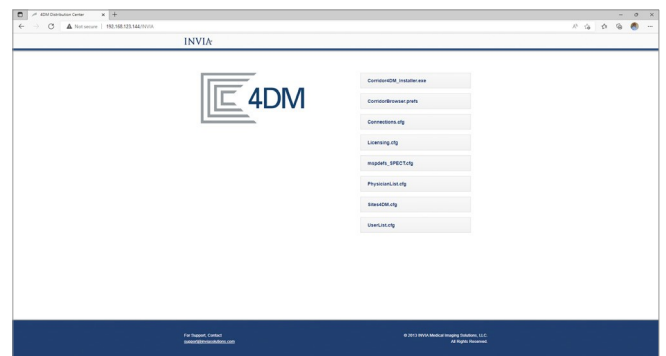


Figure 38: Web browser interface

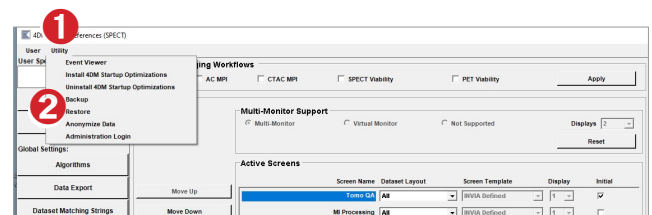


Figure 39: 4DM Preferences

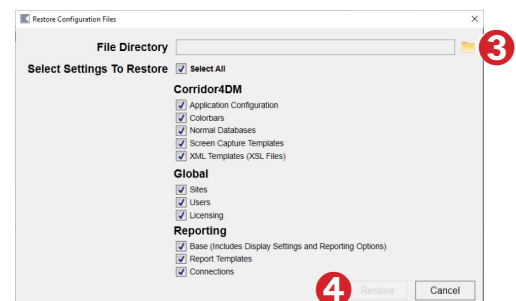


Figure 40: Restore configuration files